

BL #8



PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/719,379A

DATE: 12/11/2002

TIME: 09:35:49

Input Set : N:\Crf4\12022002\I719379.raw
 Output Set: N:\CRF4\12112002\I719379A.raw

1 <110> APPLICANT: Bakalatz, Lauren O.
 2 Cohen, Joseph
 3 Dequesne, Guy
 4 Lobet, Yves
 5 <120> TITLE OF INVENTION: Vaccine
 6 <130> FILE REFERENCE: B45145
 7 <140> CURRENT APPLICATION NUMBER: US/09/719,379A
 8 <141> CURRENT FILING DATE: 2000-12-11
 9 <150> PRIOR APPLICATION NUMBER: PCT/US99/11980
 10 <151> PRIOR FILING DATE: 1999-05-28
 11 <150> PRIOR APPLICATION NUMBER: GB 9812613.9
 12 <151> PRIOR FILING DATE: 1998-06-11
 13 <160> NUMBER OF SEQ ID NOS: 81
 14 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 19
 18 <212> TYPE: PRT
 19 <213> ORGANISM: Haemophilus influenzae strain ntHi-10567RM
 20 <400> SEQUENCE: 1
 Arg Ser Asp Tyr Lys Phe Tyr Glu Ala Ala Asn Gly Thr Arg Asp His
 1 5 10 15
 Lys Lys Gly
 23 <210> SEQ ID NO: 2
 26 <211> LENGTH: 22
 27 <212> TYPE: PRT
 28 <213> ORGANISM: Haemophilus influenzae strain ntHi-1715MEE
 29 <400> SEQUENCE: 2
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 31 1 5 10 15
 Leu Lys Asn Leu Gly Glu
 33 20
 35 <210> SEQ ID NO: 3
 36 <211> LENGTH: 13
 37 <212> TYPE: PRT
 38 <213> ORGANISM: Haemophilus influenza strain ntHi-1729MEE
 39 <400> SEQUENCE: 3
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 41 1 5 10
 43 <210> SEQ ID NO: 4
 44 <211> LENGTH: 19
 45 <212> TYPE: PRT
 46 <213> ORGANISM: Haemophilus influenzae strain ntHi-183NP
 47 <400> SEQUENCE: 4

ENTERED

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Input Set : N:\Crf4\12022002\I719379.raw
 Output Set: N:\CRF4\12112002\I719379A.raw

48 Arg Ser Asp Tyr Lys Leu Tyr Asn Lys Asn Ser Ser Thr Leu Lys Asp
 49 1 5 10 15
 50 Leu Gly Glu
 52 <210> SEQ ID NO: 5
 53 <211> LENGTH: 19
 54 <212> TYPE: PRT
 55 <213> ORGANISM: Haemophilus influenzae strain ntHi-1128
 56 <400> SEQUENCE: 5
 57 Arg Ser Asp Tyr Lys Phe Tyr Glu Asp Ala Asn Gly Thr Arg Asp His
 58 1 5 10 15
 59 Lys Lys Gly
 61 <210> SEQ ID NO: 6
 62 <211> LENGTH: 19
 63 <212> TYPE: PRT
 64 <213> ORGANISM: Non-typable Haemophilus influenzae
 65 <220> FEATURE:
 66 <221> NAME/KEY: VARIANT
 67 <222> LOCATION: 16
 68 <223> OTHER INFORMATION: Xaa = Any Amino Acid
 69 <400> SEQUENCE: 6
 W--> 70 Arg Ser Asp Tyr Lys Phe Tyr Glu Ala Pro Asn Ser Thr Arg Asp Xaa
 71 1 5 10 15
 72 Lys Lys Gly
 74 <210> SEQ ID NO: 7
 75 <211> LENGTH: 19
 76 <212> TYPE: PRT
 77 <213> ORGANISM: Haemophilus influenzae strain ntHi-152NP
 78 <400> SEQUENCE: 7
 79 Arg Ser Asp Tyr Lys Phe Tyr Glu Asp Ala Asp Gly Thr Arg Asp His
 80 1 5 10 15
 81 Lys Lys Gly
 83 <210> SEQ ID NO: 8
 84 <211> LENGTH: 19
 85 <212> TYPE: PRT
 86 <213> ORGANISM: Haemophilus influenzae strain ntHi-1234MEE
 87 <400> SEQUENCE: 8
 88 Arg Ser Asp Tyr Lys Phe Tyr Asp Asp Ala Asn Gly Thr Arg Asp His
 89 1 5 10 15
 90 Lys Lys Gly
 92 <210> SEQ ID NO: 9
 93 <211> LENGTH: 19
 94 <212> TYPE: PRT
 95 <213> ORGANISM: Haemophilus influenzae strain ntHi-90100RM
 96 <400> SEQUENCE: 9
 97 Arg Ser Asp Tyr Lys Phe Tyr Glu Asp Glu Asn Gly Thr Arg Asp His
 98 1 5 10 15
 99 Lys Lys Gly
 101 <210> SEQ ID NO: 10
 102 <211> LENGTH: 19

RAW SEQUENCE LISTING

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Input Set : N:\Crf4\12022002\I719379.raw
Output Set: N:\CRF4\12112002\I719379A.raw

103 <212> TYPE: PRT
104 <213> ORGANISM: Haemophilus influenzae strain ntHi-86027NP
105 <400> SEQUENCE: 10
106 Arg Ser Asp Tyr Lys Phe Tyr Glu Val Ala Asn Gly Thr Arg Asp His
107 1 5 10 15
108 Lys Lys Gly
110 <210> SEQ ID NO: 11
111 <211> LENGTH: 19
112 <212> TYPE: PRT
113 <213> ORGANISM: Haemophilus influenzae strain ntHi-476
114 <400> SEQUENCE: 11
115 Arg Ser Asp Tyr Lys Phe Tyr Glu Glu Ala Asn Gly Thr Arg Asp His
116 1 5 10 15
117 Lys Lys Gly
119 <210> SEQ ID NO: 12
120 <211> LENGTH: 19
121 <212> TYPE: PRT
122 <213> ORGANISM: Haemophilus influenzae strain ntHi-166NP
123 <400> SEQUENCE: 12
124 Arg Ser Asp Tyr Lys Phe Tyr Asn Asp Ala Asn Gly Thr Arg Asp His
125 1 5 10 15
126 Lys Lys Ser
128 <210> SEQ ID NO: 13
129 <211> LENGTH: 19
130 <212> TYPE: PRT
131 <213> ORGANISM: Haemophilus influenzae strain ntHi-1848NP
132 <400> SEQUENCE: 13
133 Arg Ser Asp Tyr Lys Phe Tyr Glu Val Ala Asn Gly Thr Arg Asp His
134 1 5 10 15
135 Lys Lys Ser
137 <210> SEQ ID NO: 14
138 <211> LENGTH: 19
139 <212> TYPE: PRT
140 <213> ORGANISM: Haemophilus influenzae strain ntHi-567
141 <400> SEQUENCE: 14
142 Arg Ser Asp Tyr Lys Phe Tyr Glu Asp Ala Asn Gly Thr Arg Asp Arg
143 1 5 10 15
144 Lys Thr Gly
146 <210> SEQ ID NO: 15
147 <211> LENGTH: 19
148 <212> TYPE: PRT
149 <213> ORGANISM: Haemophilus influenzae strain ntHi-484
150 <400> SEQUENCE: 15
151 Arg Ser Asp Tyr Lys Phe Tyr Glu Asp Ala Asn Gly Thr Arg Lys His
152 1 5 10 15
153 Lys Glu Gly
155 <210> SEQ ID NO: 16
156 <211> LENGTH: 19
157 <212> TYPE: PRT

RAW SEQUENCE LISTING

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Input Set : N:\Crf4\12022002\I719379.raw
Output Set: N:\CRF4\12112002\I719379A.raw

158 <213> ORGANISM: Haemophilus influenzae strain ntHi-10559RM
159 <400> SEQUENCE: 16
160 Arg Ser Asp Tyr Lys Leu Tyr Glu Val Ala Asn Gly Thr Arg Asp His
161 1 5 10 15
162 Lys Lys Ser
164 <210> SEQ ID NO: 17
165 <211> LENGTH: 19
166 <212> TYPE: PRT
167 <213> ORGANISM: Haemophilus influenzae strain ntHi-601
168 <400> SEQUENCE: 17
169 Arg Ser Asp Tyr Lys Phe Tyr Glu Val Ala Asn Gly Thr Arg Asp His
170 1 5 10 15
171 Lys Gln Ser
173 <210> SEQ ID NO: 18
174 <211> LENGTH: 19
175 <212> TYPE: PRT
176 <213> ORGANISM: Haemophilus influenzae strain ntHi-226NP
177 <400> SEQUENCE: 18
178 Arg Ser Asp Tyr Lys Phe Tyr Glu Glu Ala Asn Gly Thr Arg Asp His
179 1 5 10 15
180 Lys Arg Ser
182 <210> SEQ ID NO: 19
183 <211> LENGTH: 19
184 <212> TYPE: PRT
185 <213> ORGANISM: Haemophilus influenzae strain ntHi-480
186 <400> SEQUENCE: 19
187 Arg Ser Asp Tyr Lys Phe Tyr Glu Asp Ala Asn Gly Thr Arg Glu Arg
188 1 5 10 15
189 Lys Arg Gly
191 <210> SEQ ID NO: 20
192 <211> LENGTH: 19
193 <212> TYPE: PRT
194 <213> ORGANISM: Haemophilus influenzae strain ntHi-1657MEE
195 <400> SEQUENCE: 20
196 Arg Ser Asp Tyr Lys Phe Tyr Glu Val Ala Asn Gly Thr Arg Glu Arg
197 1 5 10 15
198 Lys Lys Gly
200 <210> SEQ ID NO: 21
201 <211> LENGTH: 19
202 <212> TYPE: PRT
203 <213> ORGANISM: Haemophilus influenzae strain ntHi-214NP
204 <400> SEQUENCE: 21
205 Arg Ser Asp Tyr Lys Phe Tyr Glu Val Pro Asn Gly Thr Arg Asp His
206 1 5 10 15
207 Lys Gln Ser
209 <210> SEQ ID NO: 22
210 <211> LENGTH: 19
211 <212> TYPE: PRT
212 <213> ORGANISM: Haemophilus influenzae strain ntHi-250NP

RAW SEQUENCE LISTING

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Input Set : N:\Crf4\12022002\I719379.raw
Output Set: N:\CRF4\12112002\I719379A.raw

213 <400> SEQUENCE: 22
214 Arg Ser Asp Tyr Lys Arg Tyr Glu Glu Ala Asn Gly Thr Arg Asn His
215 1 5 10 15
216 Asp Lys Gly
218 <210> SEQ ID NO: 23
219 <211> LENGTH: 19
220 <212> TYPE: PRT
221 <213> ORGANISM: Haemophilus influenzae strain ntHi-499
222 <400> SEQUENCE: 23
223 Arg Ser Asp Tyr Glu Phe Tyr Glu Ala Pro Asn Ser Thr Arg Asp His
224 1 5 10 15
225 Lys Lys Gly
227 <210> SEQ ID NO: 24
228 <211> LENGTH: 21
229 <212> TYPE: PRT
230 <213> ORGANISM: Haemophilus influenzae strain ntHi-492
231 <400> SEQUENCE: 24
232 Arg Ser Asp Tyr Lys Leu Tyr Asn Lys Asn Ser Ser Asn Ser Thr Leu
233 1 5 10 15
234 Lys Asn Leu Gly Glu
235 20
237 <210> SEQ ID NO: 25
238 <211> LENGTH: 21
239 <212> TYPE: PRT
240 <213> ORGANISM: Haemophilus influenzae strain ntHi-502
241 <400> SEQUENCE: 25
242 Arg Ser Asp Tyr Lys Leu Tyr Asp Lys Asn Ser Ser Ser Asn Thr Leu
243 1 5 10 15
244 Lys Lys Leu Gly Glu
245 20
247 <210> SEQ ID NO: 26
248 <211> LENGTH: 20
249 <212> TYPE: PRT
250 <213> ORGANISM: Haemophilus influenzae strain ntHi-165NP
251 <400> SEQUENCE: 26
252 Arg Ser Asp Tyr Lys Leu Tyr Asn Lys Asn Ser Ser Asn Thr Leu Lys
253 1 5 10 15
254 Asp Leu Gly Glu
255 20
257 <210> SEQ ID NO: 27
258 <211> LENGTH: 20
259 <212> TYPE: PRT
260 <213> ORGANISM: Haemophilus influenzae strain ntHi-495
261 <400> SEQUENCE: 27
262 Arg Ser Asp Tyr Lys Leu Tyr Asn Lys Asn Ser Ser Asp Ala Leu Lys
263 1 5 10 15
264 Lys Leu Gly Glu
265 20
267 <210> SEQ ID NO: 28

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/11/2002
PATENT APPLICATION: US/09/719,379A TIME: 09:35:50

Input Set : N:\Crf4\12022002\I719379.raw
Output Set: N:\CRF4\12112002\I719379A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 16

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/719,379A

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Input Set : N:\Crf4\12022002\I719379.raw

Output Set: N:\CRF4\12112002\I719379A.raw

L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0